

### **REMARKS**

This is a full and timely response to the Office Action mailed November 15, 2006, submitted concurrently with a one month extension of time to extend the due date for response to March 15, 2007.

Claim 3 has been amended to put the claims in better form under U.S. practice. Support for the claim amendments can be found throughout the specification and the original claims. Thus, claims 1, 3, 5 and 7 are pending in this application

In view of this amendment, Applicants believe that all pending claims are in condition for allowance. Reexamination and reconsideration in light of the above amendments and the following remarks are respectfully requested.

### **Objection to the Specification**

Applicants have reviewed and effected amendments to the specification (via a substitute specification) to put the specification in proper ideomatic English as per the Examiner's request. Thus, in light of the changes to the specification, withdrawal of this objection is requested.

### **Rejection under 35 U.S.C. §112**

Claim 3 is rejected under 35 U.S.C. §112, second paragraph, for allegedly being indefinite. Applicant respectfully traverses this rejection.

However, in the interest of expediting the allowance of the present application, Applicant has effected changes to claim 3 which should overcome the Examiner's concerns. Specifically, Applicant has amended claim 3 to replace the term "reside" with the term "residue".

Thus, withdrawal of this rejection is respectfully requested.

### **Rejections under 35 U.S.C. §102 and §103**

Claims 1, 3, 5 and 7 are rejected under 35 U.S.C. §102(b) as allegedly being anticipated by, or in the alternative, under 35 U.S.C. §103(a) as allegedly being obvious over Tanaka et al. (JP 2001011327 A) or Sakairi et al. (JP 2000255644 A). Applicant respectfully traverses these

rejections.

To constitute anticipation of the claimed invention under U.S. practice, the prior art reference must literally or inherently teach each and every limitation of the claims. Further, to establish a *prima facie* case of obviousness, the following three criteria must be satisfied. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference must teach or suggest all the claim limitations. Here, in this case, the cited references, Tanaka et al. and Sakairi et al., either alone or in combination, fail to teach or suggest all the claim limitations, particularly the limitations “*wherein the solid particles mean rice powder from which bran has been removed by rice milling*”.

The biodegradable resin composition of the present application is obtained by binding a biodegradable resin with solid particles of a predetermined particle size available by pulverizing rice and composed mainly of an outer layer tissue of rice, wherein the solid particles mean rice powder from **which bran has been removed by rice milling** (or wherein the solid particles are composed of a residue having, as a main component, a substance derived from the starch layer of rice available **by removing bran from rice by rice milling**). In contrast, the biodegradable resin composition of Tanaka et al. is obtained by binding barley cleaning refuse with biodegradable resin, wherein the barley cleaning refuse comprises a hull, a seed coat, and an aleurone layer, and bran is a powder of these components. In other words, in the present biodegradable resin composition, the starch layer is used after removing the surface layer of rice (i.e. hull, seed coat, and aleurone layer) while in Tanaka et al., the surface layer of barley (bran per se) is used. Hence, it is clear that there is a significant difference in components between the biodegradable resin composition of the present application and that of Tanaka et al.

Such differences in components results in different properties between the claimed biodegradable resin composition and the composition of Tanaka et al. It is well known to one skilled in the art that the surface layer of rice or barley (i.e. bran) contains more lipid component than the starch layer. Lipids have a disadvantage of becoming oxidized when in contact with air, which causes deterioration of the biodegradable resin composition or the occurrence of hazardous

substances. Therefore, the biodegradable resin composition of Tanaka et al. which contains bran, presents such problems, while the biodegradable resin composition of the present application which does not contain bran, avoids these problems.

There is also a significant difference in components between the biodegradable resin composition of the present application and that of Sakairi et al. The composition described in Sakairi et al. is characterized as a pulp bead which is granular matter comprising mainly pulp. The inside portion of the granular matter contains a core material having a property of internally maintaining a void after swelling and comprising a layer of pulp at the periphery of the core material. Therefore, it is clear that the components of the claimed biodegradable resin composition are distinguishable from that of Sakairi et al.

It should also be noted that although rice powder and biodegradable resin are cited in Sakairi et al. as substances comprising the core material, Sakairi et al. does not teach or suggest that the rice powder and biodegradable resin are mixed to make the biodegradable resin composition. Thus, Applicant believes that it is impossible to arrive at the present invention from the teachings and suggestions of Sakairi et al.

As the Examiner already knows, it is well known under U.S. practice that the structure (and/or composition) implied by the process steps should be considered when assessing the patentability of product-by-process claims over the prior art, especially where the product can only be defined by the process steps by which the product is made, or where the manufacturing process steps would be expected to impart distinctive structural characteristics to the final product (see MPEP §2113 and *In re Garnero*, 412 F.2d 276, 279, 162 USPQ 221, 223 (CCPA 1979)). Applicants have shown from their comments above that the process of "*rice powder from which bran has been removed by rice milling*" impart distinctive structural characteristics to the claimed biodegradable resin composition not found in the prior art.

It should also be noted that under U.S. case law, in relying upon the theory of inherency, the Examiner *must provide a basis in fact and/or technical reasoning* to reasonably support the determination that the allegedly inherent characteristic (i.e. "*rice powder from which bran has been removed by rice milling*") necessarily flows from the teachings of the applied prior art. In other words, the extrinsic evidence must make clear that the missing descriptive matter is necessarily

present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. It should be noted that inherency may not be established by probabilities or possibilities. The mere fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. *In re* Rijckaert, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993). Since Applicants have clearly established in the comments above why the compositions disclosed in Tanaka et al. and Sakairi et al., either alone and in combination, would not possess "*rice powder from which bran has been removed by rice milling*", the Examiner cannot based his argument on the theory of inherency.

Thus, for these reasons, withdrawal of these rejections is respectfully requested.

### CONCLUSION

For the foregoing reasons, all the claims now pending in the present application are believed to be clearly patentable over the outstanding rejections. Accordingly, favorable reconsideration of the claims in light of the above remarks is courteously solicited. If the Examiner has any comments or suggestions that could place this application in even better form, the Examiner is requested to telephone the undersigned attorney at the below-listed number.

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Respectfully submitted,

By 

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